

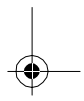
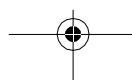
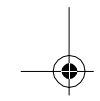
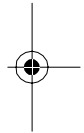
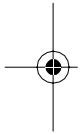
Cat. No. 42-5056

OWNER'S MANUAL

Please read before using this equipment.

CD-3445

Portable Compact Disc Player



FEATURES

Your Optimus CD-3445 Portable Compact Disc Player uses the latest digital audio technology to give you clean, crisp compact disc sound. You can connect the CD player to your home audio system with the supplied connection cable or connect a pair of stereo headphones to the CD player for private listening. The CD-3445's advanced technology makes it simple to operate. You can power your CD player from two AA alkaline or rechargeable batteries, or from standard AC power or your vehicle's battery power.

The CD player's features include:

Automatic Search Music System — lets you rapidly skip forward or backward through a CD.

Bass Boost — lets you enhance the bass frequencies when using headphones.

Intro Scan — lets you play the first 10 seconds of each track on a CD.

Random Play — lets you play the tracks on a CD in a random order.

Repeat Play — lets you automatically repeat a single track, an entire CD, or a programmed sequence.

Memory Function — lets you program up to 21 tracks on a CD to play in any order.

Rechargeable Battery Adapter — lets you recharge nickel-cadmium rechargeable batteries while they are in the CD player's battery compartment.

Important: You need a pair of stereo headphones or amplified speakers to use your CD-3445. Your local Radio Shack store carries a complete line of headphones and speakers.

Be sure you read this Owner's Manual completely so you can take advantage of all the CD-3445's advanced features.

For your records, we suggest you record the serial number of the CD player in the space provided. The serial number is on the CD player's bottom panel.

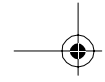
Serial Number _____

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CHOOSING A POWER SOURCE

You can power your CD player from:

- Internal battery power (using two AA alkaline or rechargeable nickel-cadmium batteries, not supplied)
- Standard AC power (using an optional AC adapter, not supplied)
- Vehicle battery power (using an optional DC adapter, not supplied)

2. Insert two AA batteries into the battery compartment according to the polarity symbols (+ and -) in the compartment.

(illus)

USING BATTERIES

You can power your CD player from two AA batteries. For the best results, we recommend alkaline batteries, such as Radio Shack Cat. No. 23-552/557. Or, you can use rechargeable nickel-cadmium batteries, such as Cat. No. 23-125, and charge them in the CD player with the supplied battery adapter.

Notes:

- Use only fresh batteries of the required size and type.
- Never mix fresh and old, alkaline and nickel-cadmium batteries, or nickel-cadmium batteries of different capacities.
- To help you remove the batteries later, place them across the ribbon.

3. Replace the cover.

Notes:

- Replace the batteries when **BATT** appears on the display, the sound distorts, or the volume weakens.
- Always dispose of old batteries promptly and properly.
- Never leave dead, old, or weak batteries in the CD player. They can leak chemicals and corrode or damage electronic circuits.

Installing Batteries

1. Slide off the battery compartment cover in the direction of the arrow.

(illus)

- If you do not plan to use the CD player from battery power for a month or more, remove and store the batteries. They might leak chemicals and corrode or damage electronic circuits.

Charging Nickel-Cadmium Batteries

Nickel-cadmium batteries come fully discharged. You can charge the batteries while they are in the battery compartment using the supplied battery adapter and an optional AC adapter (such as Cat. No. 273-1663, not supplied), or you can use an optional external battery charger (such as Cat. No. 23-133, not supplied).

Warning: Do not try to charge non-rechargeable batteries. They might get very hot and possibly explode.

Follow these steps to recharge nickel-cadmium batteries in the battery compartment.

1. Put two rechargeable batteries into the supplied battery adapter according to the polarity symbols (+ and –) on the adapter.

2. Insert the battery adapter into the battery compartment according to the polarity symbols (+ and –) inside the compartment.
3. Plug the AC adapter's barrel plug into the CD player's **DC 6V** jack. Then plug the other end of the adapter into a standard AC outlet.

(illus)

Note: With the CD player turned off, it takes about 15 hours to charge fully discharged nickel-cadmium batteries.

4. When the batteries are fully charged, unplug the AC adapter from the AC outlet.

(illus)

Charging Tips

- Fully discharge the batteries occasionally by playing the CD player until it no longer plays. Then fully recharge the batteries. This helps restore the batteries' full charging capacity.
- Avoid charging the batteries in a hot environment (higher than 113°F). Doing so can permanently reduce the batteries' charging capacity.
- Do not overcharge batteries. Overcharging can severely reduce the batteries' useful life.

Important: This CD player is capable of using nickel-cadmium batteries. At the end of the batteries' useful life, they must be recycled or disposed of properly. Contact your local, county, or state hazardous waste management authorities for information on recycling or disposal programs in your area. Some options that might be available are municipal curb-side collection, drop-off boxes at retailers, recycling collection centers, and mail-back programs.

USING AC POWER

You can power your CD player with standard AC power using a 6-volt AC adapter such as Cat. No. 273-1663.

Caution: The recommended AC adapter supplies regulated 6 volts and delivers at least 600 milliamps. Its center tip is set to positive, and its plug correctly fits the CD player's **DC 6V** jack. Using an adapter that does not meet these specifications could seriously damage the CD player or the adapter.

To connect to AC power, insert the AC adapter's barrel plug into the CD player's **DC 6V** jack, then plug the other end of the adapter into a standard AC outlet.

(illus)

Note: When you connect an AC adapter, the CD player automatically switches to external power, even if batteries are installed.

USING VEHICLE BATTERY POWER

You can power your CD player from your vehicle's battery power using a 6-volt DC adapter such as Cat. No. 270-1563.

Caution: The recommended DC adapter supplies regulated 6 volts and delivers at least 600 milliamps. Its white adaptaplug correctly fits the CD player's **DC 6V** jack and you can set its center tip to positive. Using an adapter that does not meet these specifications could seriously damage the CD player or the adapter.

Follow these steps to connect your CD player to your vehicle's battery power.

1. Insert the white adaptaplug into the adapter's wire socket so TIP and **+** line up.
2. Insert the DC adapter's barrel plug into the CD player's **DC 6V** jack.

3. Plug the other end of the adapter into your vehicle's cigarette-lighter socket.

(illus)

Note: When you connect a DC adapter, the CD player automatically switches to external power, even if batteries are installed.

CONNECTIONS

You can listen to your CD-3445 by connecting stereo headphones to the CD player's **PHONES** jack or by connecting amplified speakers or a home audio or autosound system to the **LINE OUT** jack using the supplied Y-adaptor cable.

Notes:

- The CD player's **PHONES** jack is a high-level audio output, and its volume is controlled by the CD player's **VOLUME** control. Use this jack with headphones or amplified speakers that do not have a volume control.
- The CD player's **LINE OUT** jack is a low-level audio output, and its volume is controlled by the volume control of the amplified speakers, home audio system, or autosound system.
- Your local Radio Shack store carries a variety of headphones and amplified speakers.

CONNECTING HEADPHONES

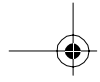
For private listening, plug a pair of stereo headphones with a $\frac{1}{8}$ -inch plug into the CD player's **PHONES** jack.

(illus)

Listening Safely

To protect your hearing, follow these guidelines when you use headphones.

- Set the volume to the lowest setting before you begin listening. After you begin listening, adjust the volume to a comfortable level.
- Do not listen at extremely high volume levels. Extended high-volume listening can lead to permanent hearing loss.
- Once you set the volume, do not increase it. Over time, your ears adapt to the volume level, so a volume level that does not cause discomfort might still damage your hearing.



Traffic Safety

Do not wear headphones while operating a motor vehicle or riding a bicycle. This can create a traffic hazard and is illegal in some areas.

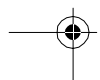
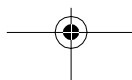
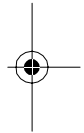
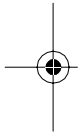
Even though some headphones are designed to let you hear some outside sounds when listening at normal volume levels, they still present a traffic hazard.

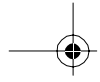
CONNECTING AMPLIFIED SPEAKERS

(illus)

To listen to your CD player through speakers, plug a pair of amplified speakers with a $\frac{1}{8}$ -inch plug into the CD player's **LINE OUT** jack using either:

- The supplied Y-adapter cable.
- The amplified speakers' built-in Y-cable





OPERATION

Warning: This CD player has a wide dynamic range. If you turn up your amplifier's volume too high during soft (low volume) parts of the music, you might damage your hearing when a sudden loud passage occurs.

3. Press **OPEN** and lift the disc compartment cover. **OPEN** appears on the display.

(illus)

PLAYING A CD

Follow these steps to play a CD.

1. Set **POWER** to **ON**. **00** briefly appears on the display, then **disc** appears.

(illus)

4. Carefully place the CD, label side up, over the disc compartment's center hub.

(illus)

2. Set **VOLUME** to the minimum level.

(illus)

5. Gently press down on the CD until it clicks in place, then close the disc compartment cover. The display briefly shows **00** then the total number of tracks and the total playing time.
6. Press **⏮** (Play/Pause). Track 1 begins to play while **⏮**, **01**, and the track's elapsed playback time appear on the display.

(illus)

7. If you connected headphones to the CD player's **PHONES** jack, adjust the CD player's **VOLUME** control to set the desired volume level.

If you connected amplified speakers or a home audio or autosound system to the CD player's **LINE OUT** jack, adjust the volume controls on those units to set the desired volume level.

8. If you are using headphones, set **BASS BOOST** to **ON** to enhance bass frequencies.

SPECIAL FEATURES

Track Skipping/Searching

Use **▶▶I** or **I◀◀** (Skip/Search) to rapidly search forward or backward to locate a specific track or section of the CD.

(illus)

To skip forward through the tracks, press **▶▶I**. To skip backward, press **I◀◀**. The current track number appears on the display.

To search within a track, press and hold either button. You hear the track play rapidly and at a lower volume. Release the button to resume normal play.

When the last track finishes playing, the CD player automatically stops.

To stop playing the CD before it automatically stops, press **n** (Stop). The display shows the total number of tracks and the CD's total playing time.

(illus)



Intro Scan

Press **INTRO SCAN** to play the first 10 seconds of each track on the CD. **INTRO**, the track number, and the elapsed time appear on the display.

(illus)

If you hear a track you want to listen to, press **INTRO/SCAN** again. **INTRO** disappears from the display, and normal playback resumes.

To cancel intro/scan play, press **n** (Stop).

Random Play

To play the tracks on a CD in random order, press **RANDOM**, then **PLAY**. **RANDOM** appears on the display, and the CD player randomly plays all the tracks once, then stops.

(illus)

To cancel random play, press **RANDOM** again.

Repeat Playback

Your CD player can repeat:

- A single track
- The entire CD
- A programmed sequence
- Randomly selected tracks

To repeat a single track, while your desired track is playing, press **REPEAT**. **REPEAT 1** appears on the display, and the track plays repeatedly.

(illus)

To repeat an entire CD, press **REPEAT** until **REPEAT ALL** appears on the display. When the CD player reaches the end of the CD, it returns to the first track and replays all of the tracks.

To repeat all tracks randomly, while **RANDOM** appears on the display, press **REPEAT** until **REPEAT ALL** appears on the display. All tracks on the CD play repeatedly in a random order.

To repeat a programmed sequence, after you program a sequence (see "Storing a Programmed Sequence"), press **REPEAT** until **REPEAT ALL** appears. After the last track finishes, the programmed tracks play repeatedly.

To cancel repeat play, press **n** (Stop).

Storing a Programmed Sequence

You can program up to 21 tracks on a CD to play in any order you choose. You can program the same track to play more than once.

1. Press **MEMORY**. **P:01** (the first memory location) appears.

(illus)

2. Press either **▶▶I** or **I◀◀** to find the track number you want to store.

(illus)

3. Press **MEMORY** again. The track is stored in memory.
4. Repeat Steps 2 and 3 to store more tracks.
5. Press **↵II** (Play/Pause). Playback starts with the first track you stored and stops after the last track you stored.

Note: You can use either **▶▶I** or **I◀◀** to move to another track in the programmed sequence.

6. To play the tracks in memory again, press **MEMORY**, then press **↵II** (Play/Pause).

To stop playback, press **n** (Stop).

To clear the memory sequence, press **STOP**, then press **OPEN**.

Checking/Editing a Programmed Sequence

You can check and change any of the stored tracks in your programmed sequence.

1. Press **MEMORY**. The memory location and the track stored in it appear on the display.

Notes:

- Repeatedly press **MEMORY** to see the next stored track.
- When you store less than 21 tracks, if you continue to press **MEMORY** after the last stored track appears, the display returns to **00**.
- When you store 21 tracks, if you continue to press **MEMORY** after **P:21** appears on the display, the display returns to **01**.

2. When the track you want to change appears on the display, press either **▶▶I** or **I◀◀** to find the track number you want to replace it with.

(illus)

3. Press **MEMORY** again. The track is stored in memory.
4. Repeat Steps 2 and 3 to change more tracks.

CD PLAYER TIPS

- CDs that can be played on this player have this mark on them:

LOGO

- If you move the player from a very cold room to a warmer one, moisture can condense on the pickup lens, preventing proper disc play. If this happens, wait 30 minutes before resuming play.
- Do not place foreign objects in the disc tray. This can damage the drive mechanism.

CARING FOR COMPACT DISCS

Even though CDs are very durable, treat them with care.

- Do not write on either side of a CD, particularly the non-label side. (Signals are read from the non-label side.)
- Do not store CDs in high-temperature, high-humidity locations. The CDs might warp.
- Keep the CD dry. A water drop can act as a lens and affect the laser beam's focus.
- Always keep the CD in its protective case or sleeve when it is not in use.
- Always handle a CD by the edges to avoid fingerprints or scratches on the playing surface which can prevent the laser beam from correctly reading the digital information or create a "skipping" sound.
- To remove fingerprints and clean the CD surface, use a CD cleaner kit (such as Cat. No. 42-226).
- To repair scratches on the CD surface, use a CD scratch repair kit (such as "Scratch 'n Fix", Cat. No. 42-127).

CARE AND MAINTENANCE

Your CD-3445 Portable Compact Disc Player is an example of superior design and craftsmanship. The following suggestions will help you care for the CD player so you can enjoy it for years.



Keep the CD player dry. If it gets wet, wipe it dry immediately. Liquids might contain minerals that can corrode the electronic circuits.



Handle the CD player gently and carefully. Dropping it can damage the circuit board and case, and can cause the player to work improperly.



Use and store the CD player only in normal temperature environments. Temperature extremes can shorten the life of electronic devices, damage batteries and distort or melt plastic parts.



Keep the CD player away from dust and dirt, which can cause premature wear of parts.



Wipe the CD player with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the CD player.



Use only fresh batteries of the required size and type. Always remove old or weak batteries. They can leak chemicals that destroy electronic circuits.

Modifying or tampering with the CD player's internal components can cause a malfunction and might invalidate the CD player's warranty and void your FCC authorization to operate it. If your CD player is not performing as it should, take it to your local Radio Shack store for assistance.

FCC INFORMATION

This equipment complies with the limits for a Class B digital device as specified in Part 15 of *FCC Rules*. These limits provide reasonable protection against radio and TV interference in a residential area. However, your equipment might cause TV or radio interference even when it is operating properly. To eliminate interference, you can try one or more of the following corrective measures:

- Increase the distance between the equipment and the radio or TV.
- Use outlets on different electrical circuits for the equipment and the radio or TV.

Consult your local Radio Shack store or an experienced radio/TV technician if the problem still exists.

LASER SAFETY

This unit employs a laser light beam. Only a qualified service person should remove the cover or attempt to service this device, due to possible eye injury.

Warning: The use of controls or adjustments, or the performance of procedures other than specified herein, can result in hazardous exposure to laser light.

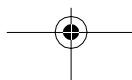
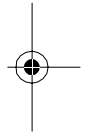
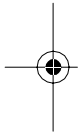
SPECIFICATIONS

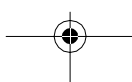
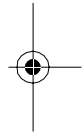
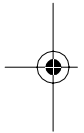
Format	Compact Disc, Digital Audio System
Pickup.....	3-Beam, Semiconductor
Laser Decoding (D/A)	1 Bit Linear
Frequency Response	20 Hz to 20 kHz, ± 3 dB
Total Harmonic Distortion	Less Than 0.02%, 1 kHz
Signal-to Noise Ratio (A-Weighted).....	Better Than 85 dB
Wow & Flutter.	Below Measurement Limit
Power Requirement.....	Internal 3VDC (2 AA Batteries) or, External 6VDC (AC adapter, Cat. No. 273-1663, or DC adapter, Cat. No. 270-1563)
Power Consumption	2 Watts
Dimensions (HWD)	$1\frac{1}{8} \times 5\frac{1}{8} \times 6\frac{1}{8}$ inches (27 \times 130 \times 154 mm)
Weight	10.6 oz. (300 g)
Included Accessories.....	Y-Cable, Rechargeable Battery Adapter

Specifications are typical; individual units might vary. Specifications are subject to change and improvement without notice.



NOTES





RADIO SHACK LIMITED WARRANTY

This product is warranted against defects for 90 days from date of purchase from Radio Shack company-owned stores and authorized Radio Shack franchisees and dealers. Within this period, we will repair it without charge for parts and labor. Simply **bring your Radio Shack sales slip** as proof of purchase date to any Radio Shack store. Warranty does not cover transportation costs. Nor does it cover a product subjected to misuse or accidental damage.

EXCEPT AS PROVIDED HEREIN, RADIO SHACK MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. Some states do not permit limitation or exclusion of implied warranties; therefore, the aforesaid limitation(s) or exclusion(s) may not apply to the purchaser.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

We Service What We Sell

9/94

RADIO SHACK
A Division of Tandy Corporation
Fort Worth, Texas 76102

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